IV. RIP SIDE BY SIDE ANALYSIS

SAN JUAN RIVER AND UPPER COLORADO RIVER BASIN





Upper Colorado River Basin and San Juan River Recovery Implementation Programs

Ecological Services

New Mexico State Office

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Upper Colorado River Basin and San Juan River Recovery Implementation Programs

The Upper Colorado River Basin and San Juan River Recovery Implementation Programs are cooperative, long-term programs of Federal, Tribal, and State agencies, environmental organizations, and water development interests aimed at re-establishing self-sustaining populations of endangered Colorado River fish species while providing for continued water development in these two river basins. The Upper Colorado River Program, administered by the Fish and Wildlife Service's Region 6, encompasses the Upper Colorado River upstream from Lake Powell, excluding the San Juan River. The San Juan River is included in its own Program that is administered by the Service's Region 2.

An important approach that is common to both the Programs is that they each can serve as "reasonable and prudent alternatives" for water development proposals (Region 6) or any action (Region 2) undergoing formal consultation under section 7 of the Endangered Species Act, when it is determined that a proposed action is likely to jeopardize the continued existence of the endangered fish. Of course, this interpretation is possible only when the proposed project or action is consistent with the terms of the respective Recovery Program.

The two Programs, by virtue of not only the time of their establishment (Upper Colorado RIP - 1988; and San Juan RIP - 1992), but of the river systems, land ownerships, and development activities within those systems, differ in their make up and in their approach. The Upper Colorado RIP deals primarily with the impacts upon the endangered fish and their designated critical habitats brought about through depletion of flows. The San Juan RIP encompasses other actions which may affect the survival and recovery of the endangered fish species, including not only water quantity, but water quality and physical habitat modification. These aspects of water quality and alteration of physical habitat are still subject to full section 7 compliance within the Upper Colorado basin, but they are not covered by the Recovery Implementation Program.

Another difference between the programs, arising from increased information gathered since the inception of the Upper Colorado Program, is the native fish community approach taken in the research and management actions of the San Juan Program. Native fish communities are still priority resource issues in the ecosystems of Region 6, but they are not included in the cooperative Program.

Since the establishment of both Programs, critical habitat has been designated for the endangered fish species. Questions have arisen concerning the flexibility of the programs to address the issue of adverse modification or destruction of critical habitat within their existing frameworks. The Service has informed participants of both programs that, as long as the programs continue to make documented, on-the-ground progress toward recovery of these fish, they can serve as reasonable and prudent alternatives for determinations of adverse modification of critical habitat as they have in the past for jeopardy determinations.

The following is an abbreviated side-by-side analysis of the two programs, much of the text has been taken from the agreements that established the programs or the documents guiding the on-the-ground conduct of the programs. We encourage the reader to obtain these documents for more details concerning the cooperative efforts of the Upper Colorado River Basin and the San Juan River Basin Recovery Implementation Programs.

Background, reasons for establishment

San Juan RIP

The San Juan River Basin Recovery Implementation Program was one of four components of the reasonable and prudent alternative provided in the October 25, 1991, Biological Opinion issued by Region 6 to the Bureau of Reclamation for the Animas-La Plata Project.

- 1. . . . only those Project facilities which result in a net annual depletion not to exceed 57,100 acre-feet will be constructed and operated pursuant to this biological opinion.
- 2. Reclamation has agreed to fund approximately 7 years of research effort on the San Juan River and its tributaries with emphasis on observing a biological response in the endangered fish population and habitat conditions. . . . The ultimate goal of this research is to characterize those factors which limit native fish populations in the San Juan River and to provide management options to conserve and restore the endangered fish community.
- 3. At the end of the approximately 7year research period, the Navajo Dam would be operated to mimic a natural hydrograph for the life of the Project based on the research.
- 4. There shall be a binding agreement(s) that the reservoir releases (for both the study period and for the life of the Project) are legally protected to and through the endangered fish habitat to Lake Powell. This agreement will include a commitment for the appropriate parties to develop and implement a Recovery Implementation Program for the San Juan River within 1 year.

Upper Colorado RIP

In 1984, discussions among Federal and State (Colorado, Wyoming, and Utah) governments in the Upper Colorado River basin concerning the protection of endangered fish species and the proposed development of water resources of the basin resulted in the establishment, by a Memorandum of Understanding, of the Upper Colorado River Basin Coordinating Committee. Recognizing that earlier consultations under section 7 of the Endangered Species Act had found that new water projects would likely jeopardize the continued existence of the listed fish species, this committee was charged with the identification of reasonable and prudent alternatives that would preserve the species while permitting new water development to proceed in the upper basin. They concluded that a systematic approach was needed in order to achieve the committee's fundamental objective of accommodating rare fish species conservation with continued water resource development in the upper basin. This would best be achieved through a concerted and cooperative effort to recover all four species (Colorado squawfish, humpback chub. bonytail, and razorback sucker). As a consequence, the parties determined that a comprehensive program is needed to implement a broad range of measures designed not only to preserve the listed species but to ensure their full recovery and eventual delisting under the Endangered Species Act.

Purpose and Goals

San Juan RIP

Upper Colorado RIP

...to protect and recover endangered fishes in the San Juan River basin while water development proceeds in compliance with all applicable federal and state laws... it is anticipated that actions taken under this implementation Program also will provide benefits to other native fishes in the Basin and prevent them from becoming endangered in the future (San Juan RIP document 1992).

. . . to recover the endangered fishes while providing for existing and new water development to proceed in the Upper Basin (Cooperative Agreement, 1988).

"The ultimate goal of this recovery program in the upper basin is to recover and delist the three endangered species and to manage the razorback so it would not need the protection of the Endangered Species Act" (Upper Colorado RIP Document 1987).



It is anticipated that section 7 consultations will be initiated for all existing federal actions within the baseline for the A-LP that are subject to consultation. The Service concluded that the reasonable and prudent alternative will offset 57,100 acre feet of depletion for the A-LP in addition to the depletions in the baseline. The operation of Navajo Dam to benefit the listed fish will be taken into account by the Service in its biological opinions on the depletion impact of these existing federal actions.

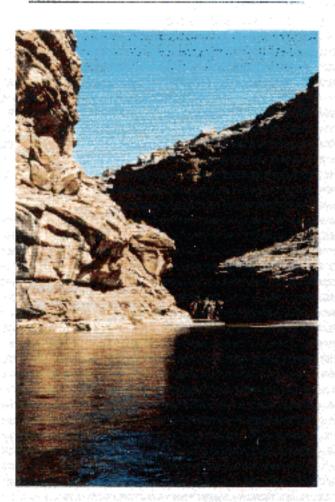
The Recovery Program is intended to offset both the direct and depletion. impacts of historic projects occurring prior to January 22, 1988 (the date) when the Cooperative Agreement for the Recovery Program was executed) if such offsets are needed to recover the fishes. An increase in depletions from a historic project occurring after January 22, 1988, will be subject to the depletion. charge. As long as the Recovery. Program is serving as the reasonable and prudent alternative, depletion charges or other measures will not be required from historic projects which undergo section. 7 consultation in the future.



Section 7 consultation

San Juan RIP

Formal section 7 consultation is required for any federal action that "may affect". listed species or result in destruction or adverse modification of critical habitat. A conference is required if a federal. action is likely to jeopardize the continued existence of any species proposed for listing as threatened or andangered, or result in the adverse modification of proposed critical habitat. The procedures and agency responsibilities under section 7consultation must be followed for such tederal actions in the Basin, including actions under this implementation. Program.



Upper Colorado RIP

Activities and accomplishments under the Recovery Program are intended to provide the reasonable and prudent alternatives which avoid the likelihood of icopardy to the continued existence of the endangered Colorado River fishes. (hereinafter the "reasonable and prudent alternative") resulting from depletion impacts of new projects and all existing or past impacts related to historic projects with the exception of the discharge by historic projects of pollutants such as trace elements, heavy metals, and pesticides. The Recovery Program also provides the reasonable. and prudent alternative which avoids the likely destruction or adverse modification. of critical habitat, to the same extent as it does to avoid the likelihood of jeopardy. (Recovery Implementation) Program Recovery Action Plan (RIPRAPI)

The Recovery Program does not provide the reasonable and prudent atternative for a new (nonhistoric) project's direct impacts (i.e., direct impacts, such as obstructions to migration routes: alteration of physical occupied habitat or critical habitat, construction, inundation, or temperature modification from reservoir releases, etc.). The Recovery Program identifies river reaches which are extremely important to the protection and recovery of the endangered fishes. Proposed actions which would result in direct impacts to these areas would likely result in a situation for which no reasonable and prudent alternative exists.

Minor depletions

San Juan RIP

In rendering biological opinions on federal actions resulting in minor depletions, the Service will consider all new information concerning project impacts and the status of the listed species, and good faith implementation of this implementation Program in determining if sufficient progress toward recovery has been made to offset depletion impacts, or any other project-induced impacts on listed fish. It is understood that the aggregate of all

minor depletions subject to section 7

period may result in a total annual

feet.

consultation during the 7-year research.

depletion of not more than 3,000 scre-

Upper Colorado RIP

The Service has generally determined. that the Recovery Program has made. sufficient progress for projects which depiete less than 3,000 agre feet (average annual depletion) to go forward. subject to payment of the depletion. charge (only new depletions are subject to the depletion charge). For depletions greater than 3,000 acre feet, the determination of sufficient progress will be made on a project-by-project basis. (Generally, the Service has determined that there has not been sufficient. progress for projects greater than 3,000 acre feet). Generally, the Service's sufficient progress determination is reviewed annually in conjunction with the annual review and update of the RIPRAP.

On July 5, 1994, the Service issued an intra-Service biological opinion which exempted depletions of 100 acre-feet or less from the depletion fee required by the Recovery Program.



Definition of sufficient progress

San Juan RIP

The Service will determine if sufficient progress has been made under this Implementation Program based on the best available biological data and professional judgement. The Service will assess progress toward recovery in proportion to the potential jeopardy impacts of a proposed federal action.

Actions that constitute progress toward recovery are those expected to lead to a positive biological response of the endangered fish species (including, but not limited to, increased abundance, improved health, improved or increased survival) or improvement of their habitat (including, but not limited to, the availability, extent, or quality of those habitats).

Actions undertaken by the Recovery Implementation Program, in and of themselves, may or may not constitute progress sufficient to offset potential jeopardy impacts to the endangered fish species from a proposed federal action. The measure of sufficient progress will be the biological response of the fish and or their habitats to the action taken.

If the Service finds, in the course of a section 7 consultation, that progress under the Implementation Program is not sufficient to offset potential jeopardy impacts of a proposed federal action, it shall discuss (a) the basis for its finding with the federal agency and any applicant and (b) the availability of reasonable and prudent alternatives that the agency and the applicant can take to avoid a violation of section 7(a)(2) of the Endangered Species Act.

Upper Colorado RIP

The Service will determine progress by the Recovery Program based on:

- a. Completion of recovery actions which result in a measurable population response, a measurable improvement in habitat for the fishes, legal protection of flows needed for recovery, or a reduction in the threat of immediate extinction.
- b. Status of fish population.
- c. Adequacy of flows.
- d. Magnitude of the impact of projects.

The Service will use accomplishments under the Recovery Program as its measure of sufficient progress.

If sufficient progress is not being achieved, biological opinions for new and historic projects will be written to identify which action(s) in the Recovery Implementation Program Recovery Action Plan (RIPRAP) must be completed to avoid jeopardy. The Service will confer with the Management Committee on the identification of these actions within established timeframes for the section 7 consultation. For historic projects, these actions will serve as the reasonable and prudent alternative as long as they are completed according to the schedule identified in the RIPRAP. For new projects, these actions will serve as a reasonable and prudent alternative so long as they are completed before the impact of the project occurs.

If the Recovery Program cannot be restored to provide the reasonable and prudent alternative, as a last resort the Service will develop a reasonable and prudent alternative, if available, with the lead Federal Agency and the project proponent.

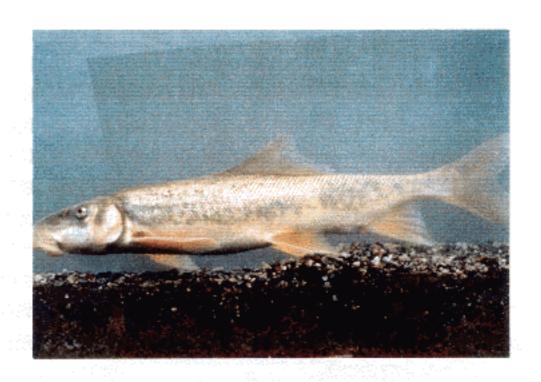
Depletion charges

San Juan RIP

Upper Colorado RIP

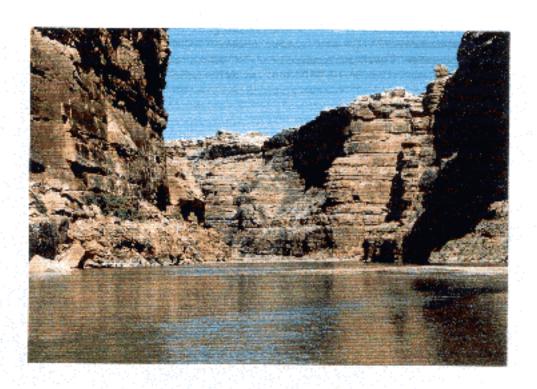
None

As a means of avoiding jeopardy, a one time charge is assessed to all projects subject to section / consultation which result in a new depletion of water from the upper basin. The depletion charge is based on the projects average annual depletion. In FY 95, the depletion charge is \$12.71/acre-foot. The depletion charge is adjusted annually for inflation. Depletion charges are paid to the National Fish and Wildlife Foundation, it goes into an interest bearing account dedicated to supporting recovery actions for the endangered Colorado River fishes. No depletion charge will be required on depletions from Bureau of Reclamation projects as long as it continues its contributions to the Recovery Program's annual budget.



The San Juan Recovery Implementation Program is designed to act, if sufficient progress toward recovery is determined by the Service, as a reasonable and prudent alternative to actions within the basin that are found likely to jeopardize the continued existence of listed aquatic species or result in the adverse modification or destruction of critical habitat in the Basin.

The Upper Colorado Program, if sufficient progress toward recovery is: achieved, is designed to act as the reasonable and prudent alternative to avoid the likelihood of jeopardy to the listed fish species and destruction or adverse modification of their critical habitat for depletion impacts of new projects and all existing or past impacts. related to historic projects with exception of discharge of contaminants. The direct impacts of new projects lobstructions to migration routes, alteration of physical occupied habitat or critical habitat, construction, inundation, or temperature modification) are not offset by the Program as a reasonable. and prudent alternative.



Long Range Implementation Plan

San Juan RIP

The plan will establish the milestones to be utilized in analyzing progress of this implementation Program. The research plan developed as a part of the section 7 consultations for the Animas-La Plata and Navajo Nation Indian Irrigation Project will be used as a basis for the overall research plan to assure that the conditions of the consultations are met.

The Long Range Implementation Plan will indicate the logical progression and priority of implementing identified recovery actions which are expected to result in recovery and delisting of the Colorado squawfish and razorback sucker. As such steps are completed. they constitute the milestones marking progress in achieving the goal of recovery of the endangered fish species. So long as the milestones established in the Long Range Implementation Plan are met, it is the mutual expectation of the Participants that this Recovery Implementation Program will serve as the foundation for a reasonable and prudent alternative for section 7 consultations, but shall not preclude the development of reasonable and prudent alternative independent of the Implementation Program.

Upper Colorado RIP

The RIPRAP was finalized in 1993 which identifies the feasible actions currently believed to be required to recover the endangered fishes in the most expeditious manner possible in the upper basin. The RIPRAP is intended to provide an operational plan for implementing the Recovery Program including development of the Recovery Program's annual work plan and future budget needs. The RIPRAP also identifies the specific recovery actions which must be accomplished in order for the Recovery Program to serve as the reasonable and prudent alternative to ieopardy and adverse modification of critical habitat (as described above). The RIPRAP was developed using the best information available and the recovery goals established for the four endangered fish species. The plan is considered an adaptive management strategy because additional information, changing priorities, and the development of the States' entitlement may require modifications to the RIPRAP.